

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A digital halftoning system that converts continuous tone image data to halftone image data, comprising:
 - a plurality of Holladay counters including at least one stochastic counter and at least one clustered-dot counter;
 - a selection circuit that selects one of the plurality of Holladay counters based on a selection indicator that corresponds to a characteristic of the continuous tone image data;
 - a look-up table including at least one clustered-dot halftone screen and at least one stochastic halftone screen ~~having a plurality of halftone screens,~~ wherein the look-up table outputs halftone image data based on a state of the selected Holladay counter and the continuous tone image data; and
 - a digital logic circuit that receives the halftone image data, and that, based on the selected Holladay counter determines whether the halftone image data is packed, and if it is determined that the halftone image data is not packed, ~~selection indicator, either~~ passes the halftone image data without changes and if it is determined that the halftone image data is packed or, selects at least a portion of the halftone image data and replicates the selected portion of the halftone image data to produce replicated halftone image data.
2. (Cancelled)
3. (Original) The digital halftoning system of claim 1, wherein the look-up table outputs high addressability halftone image data having a spatial resolution that is greater than a spatial resolution of the continuous tone image data.
4. (Currently Amended) A digital halftoning system that converts continuous tone image data to halftone image data, comprising:

a plurality of Holladay counters including at least one clustered dot counter
and at least one stochastic counter;

a selection circuit that selects one of the plurality of Holladay counters based
on a selection indicator that corresponds to a characteristic of the continuous tone image data;

a look-up table having a plurality of halftone screens including at least one
clustered-dot halftone screen and at least one stochastic halftone screen, wherein the look-up
table outputs a set of threshold values based on a state of the selected Holladay counter; ~~and~~

a comparator that compares each of the threshold image values of the set from
the look-up table to the continuous tone image data to produce halftone image data; and

a digital logic circuit that replicates a portion of the produced halftone image
data to produce replicated halftone image data when the stochastic counter is selected.

5. (Currently Amended) The digital halftoning system of claim 4, wherein the
digital logic circuit replicates a portion of the produced halftone image data when the
clustered dot counter is selected ~~further comprising digital logic circuit that receives the~~
~~halftone image data, and that, based on the selection indicator, either passes the halftone~~
~~image data without changes or selects at least a portion of the halftone image data and~~
~~replicates the selected portion of the halftone image data to produce replicated halftone image~~
~~data.~~

6. (Cancelled)

7. (Original) The digital halftoning system of claim 4, wherein the look-up table
outputs high addressability halftone image data having a spatial resolution that is greater than
a spatial resolution of the continuous tone image data.

8. (Currently Amended) A method for generating halftone data from continuous
tone image data, comprising:

selecting one of a plurality of types of Holladay counters, the plurality of types of Holladay counters including at least one clustered dot counter and at least one stochastic counter;

outputting address bits from the selected Holladay counter; and

outputting halftone image data from a look-up table based on at least the address bits from the selected Holladay counter and the continuous tone image data, wherein the look-up table includes at least one clustered-dot halftone screen and at least one stochastic halftone screen; and

controllably processing the halftone image data by determining, based on the type of the selected Holladay counter, whether the halftone image data is packed, and if it is determined that the halftone image data is not packed, passing the halftone image data without processing the halftone image data, and if it is determined that the halftone image data is packed, selecting at least a portion of the halftone image data and replicating the selected portion of the halftone image data to produce replicated halftone image data.

9. (Original) The method of claim 8, wherein outputting halftone image data from the look-up table comprises outputting high addressability halftone image data having a spatial resolution that is greater than a spatial resolution of the continuous tone image data.

10. (Cancelled)

11. (Cancelled)

12. (Currently Amended) The method of claim 8~~claim 10~~, wherein, when the selected Holladay counter implements the clustered dot halftone screen, controllably processing the halftone image data comprises outputting the halftone image data without processing the halftone image data.

13. (Currently Amended) The method of claim 8, wherein, when the selected Holladay counter implements ~~is the~~ stochastic halftone screen, controllably processing the

halftone image data comprises replicating a portion of the halftone image data to produce replicated halftone image data.

14. (Currently Amended) A method for generating halftone data from anti-aliased image data comprising:

selecting one of a plurality of Holladay counters;

outputting address bits from the selected Holladay counter;

outputting a set of threshold values from a look-up table based on at least the selected address bits, wherein the look-up table includes at least one clustered-dot halftone screen and at least one stochastic halftone screen; ~~and~~

comparing each threshold value of the set from the look-up table to the continuous tone image data to produce halftone image data; and

controllably processing the halftone image data by determining, based on the type of the selected Holladay counter, whether the halftone image data is packed, and if it is determined that the halftone image data is not packed, passing the halftone image data without processing the halftone image data, and if it is determined that the halftone image data is packed, selecting at least a portion of the halftone image data and replicating the selected portion of the halftone image data to produce replicated halftone image data.

15. (Cancelled)

16. (Currently Amended) The method of claim ~~14~~15, wherein, when the selected Holladay counter implements the clustered dot halftone screen, controllably processing the halftone image data comprises outputting the halftone image data without processing the halftone image data.

17. (Currently Amended) The method of claim ~~14~~15, wherein, when the selected Holladay counter implements the stochastic halftone screen, controllably processing the

halftone image data comprises replicating a portion of the halftone image data to produce replicated halftone image data.

18. (Original) The method of claim 14, wherein outputting halftone image data from the look-up table comprises outputting high addressability halftone image data having a spatial resolution that is greater than a spatial resolution of the continuous tone image data.

19. - 21. (Cancelled)